eLation Nation

eLation Cross Platform Mobile Apps for Innovative Systems, LLC

Overview

Product Description: The cross platform mobile apps allow customers to utilize the eLation eBill application on their Android and iOS mobile devices.

Features:
- Secure method of logging into the device
- Changeable account settings
- Access to previous billing invoices/service summaries
- Payment processing
- Usage statistics
- Support information

Key Business Goals:
- Add appeal to the already existing eLation product
- Make app intuitive/easy to use
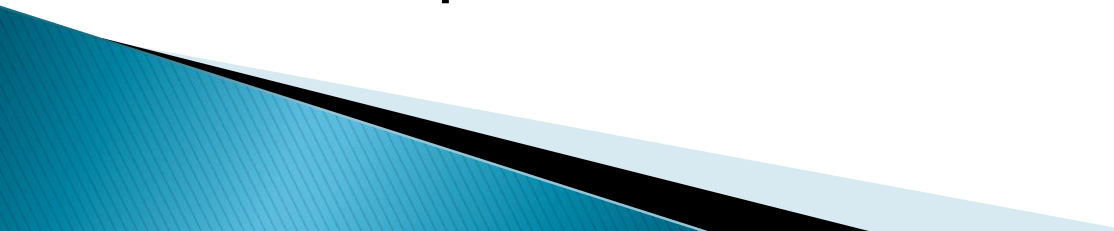- Maintain same look and feel between platforms

User Stories

User Stories

‣ As a customer with a telecom that uses Innovative Systems products, I want to change information on my account <change email, change password> from my <iOS device, Android device>.

‣ As a customer with a telecom that uses Innovative Systems products, I want to see my <latest, past> invoice for my account from my <iOS device, Android device>.

‣ As a customer with a telecom that uses Innovative Systems products, I want to see a summary of my service for my account from my <iOS device, Android device>.

‣ As a customer with a telecom that uses Innovative Systems products, I want to see the current balance for my account from my <iOS device, Android device>.

‣ As a customer with a telecom that uses Innovative Systems products, I want to make a payment on my balance for my account from my <iOS device, Android device>.

‣ As a customer with a telecom that uses Innovative Systems products, I want to set up recurring payments for my account from my <iOS device, Android device>.
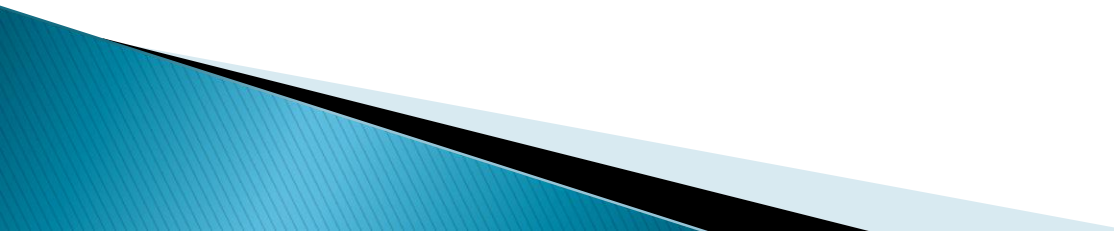
Business User Stories

‣ As a customer with a telecom that uses Innovative Systems products, I want to get contact information for the support for my company from my <iOS device, Android device>.

‣ As a customer with a telecom that uses Innovative Systems products, I have multiple accounts for both my business and my home with the same telecom. I want to be able to easily access the mobile application for both accounts from my <iOS device, Android device>.

‣ As a telecom that uses Innovative Systems products, I want my customers to see a banner that displays my telecom's name on the mobile apps that my customers use to check their account information.

Backlog Categories

- API Work

- Device UI Work

- Device UI Back End

- Database

- Sign In

- Logging

- PDF Implementation

Challenges

- Multi-platform Applications
  - Similar Interface
  - Different Languages
  - Different Devices
- Interfacing with existing services
- PDF display and usage
- Multiple Account handling
- Tablet and Mobile Device Compatibility
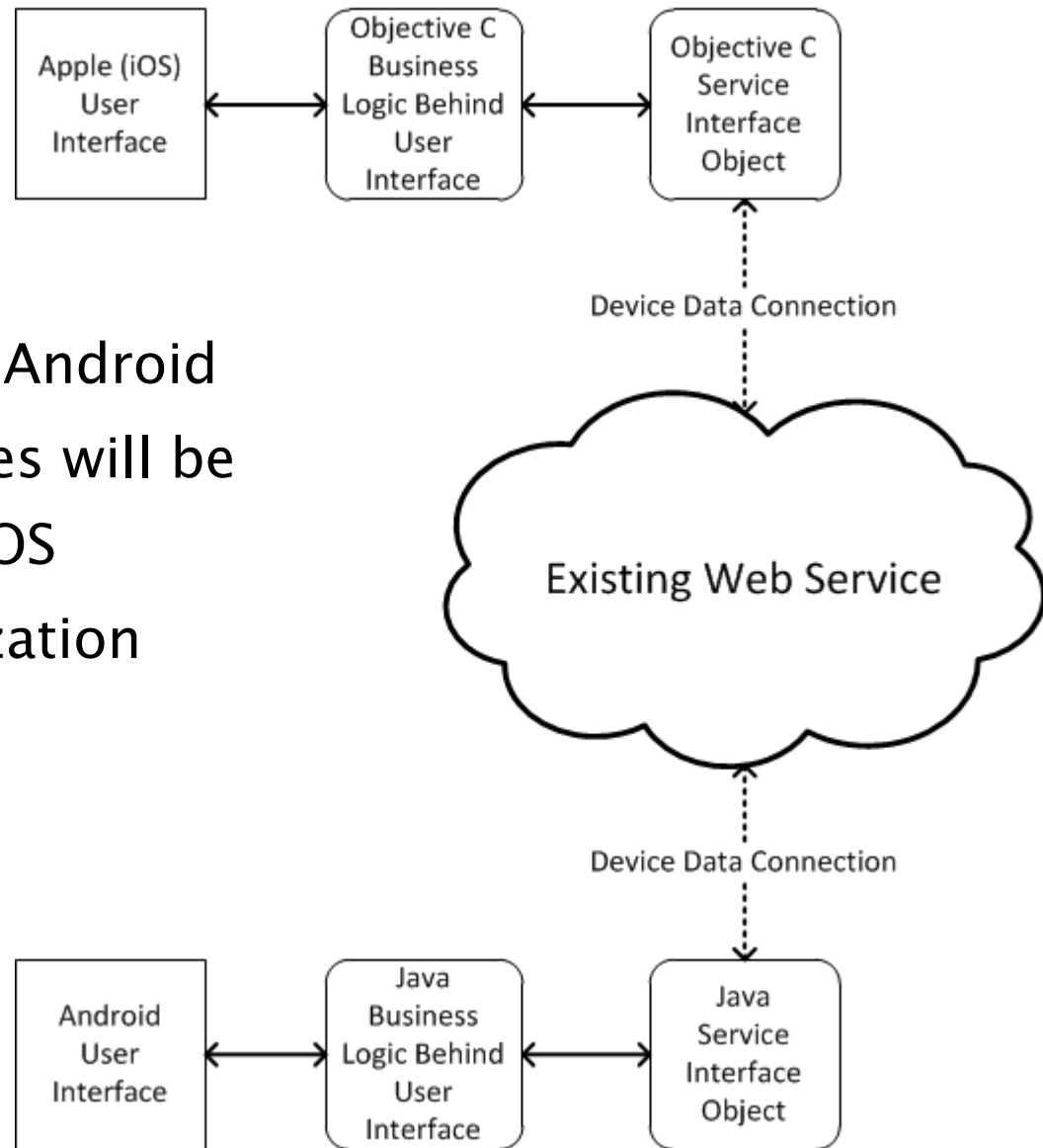
Risks

▸ API Not Complete

Risk Mitigation
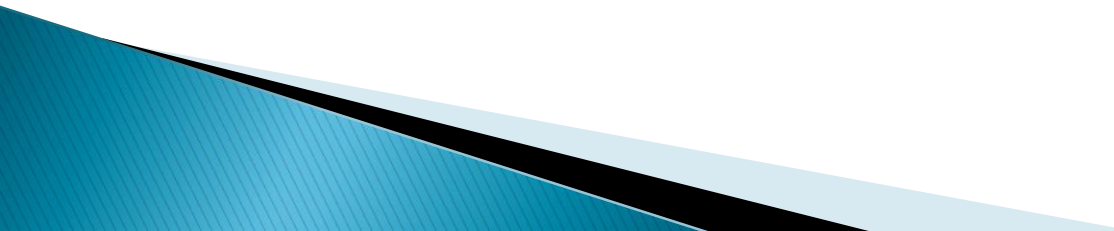
▸ Weekly communication with API Team

Architecture

Apple (iOS) User Interface ↔ Objective C Business Logic Behind User Interface ↔ Objective C Service Interface Object

Device Data Connection

Existing Web Service

Device Data Connection

Android User Interface ↔ Java Business Logic Behind User Interface ↔ Java Service Interface Object

- APIs
  - ◦ Libraries exist within Android
  - ◦ Some external libraries will be needed for JSON on iOS
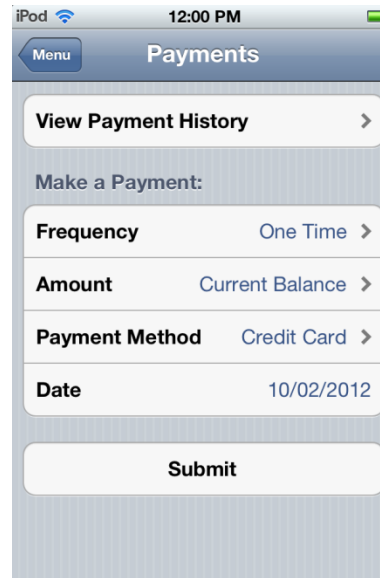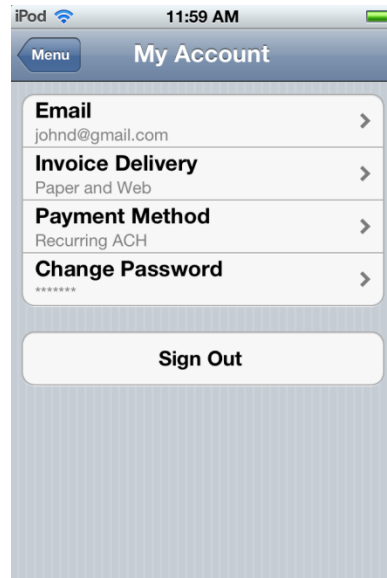 - ◦ OAuth, open authorization protocol
- Asynchronous Calls

Tools

▸ Using two Mac's and two PCs for development
▸ Android
   ◦ Eclipse, Android SDK
   ◦ Samsung Galaxy SIII, Nexus 7, Droid Pro II
▸ iOS
   ◦ Xcode, StoryBoard
   ◦ iPod, iPad
▸ Web Service
   ◦ API via JSON
▸ Repositories
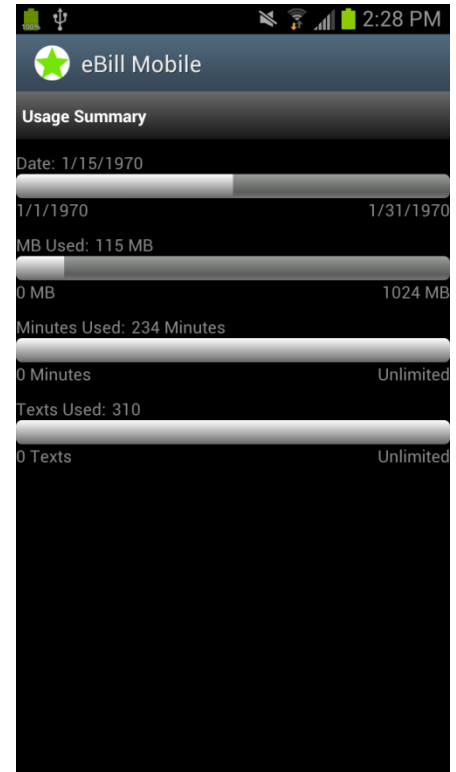   ◦ Versions SVN: Code Repository
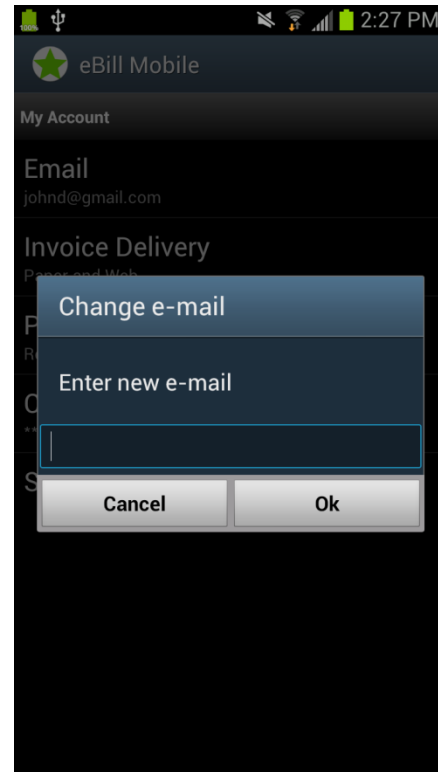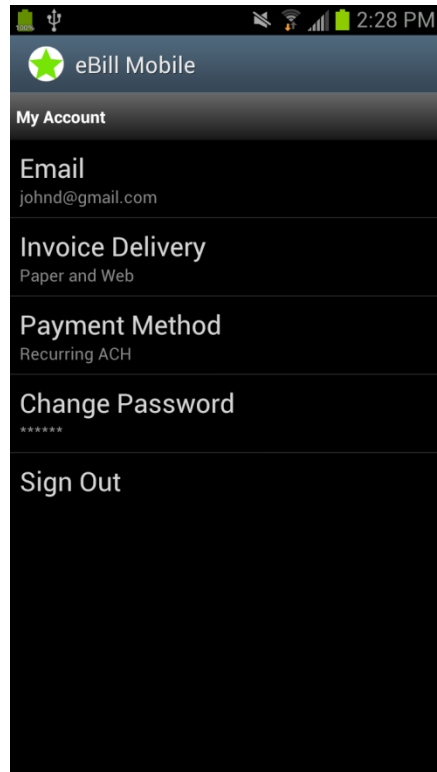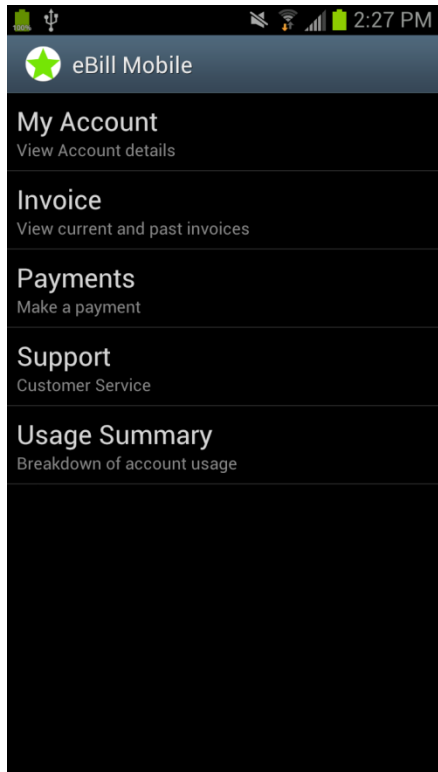   ◦ GitHub: Documentation

iOS App Design

- High Level Layout

Android App Design

- High Level Layout

Testing

- Unit Testing
  - JUnit and Sen Testing Kit
- System Testing
  - Testing on devices
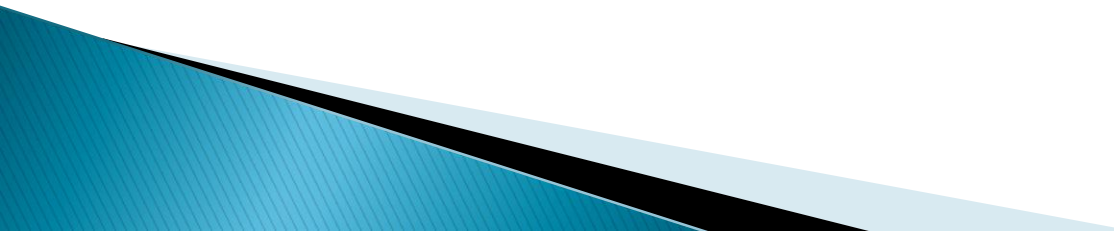 - Network Issues

Sprint 1

September 19, 2012 – October 3, 2012
- Environment Setup
  - Set up IDEs on Mac, Windows
  - Set up code repository
- Development
  - Build test JSON communication to Android and iOS devices
  - Build Android and iOS layout
- Documents
  - Team Name
  - Design Document
  - Software Contract
  - Mission Statement
  - CONOPS
  - User Stories

Sprint 2

October 10, 2012 – October 31, 2012

- Environment
  - Get eBill service installed on local server for testing
- Development
  - Finish Android and iOS UI
  - Investigate PDF on Android and iOS
  - Implement API calls
  - Android UI back end
- Documents
  - Master UI Document

Budget

- Hours Worked

- Sunk Costs
  - Mobile Devices
  - Development Machines
  - Development Server
  - API Development

Questions?